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10/614,755

07/07/2003

Kevin McQuistian

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6137

3705

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02/08/2006

ECKERT SEAMANS CHERIN & MELLOTT  
600 GRANT STREET  
44TH FLOOR  
PITTSBURGH, PA 15219

EXAMINER

JULES, FRANTZ F

ART UNIT

PAPER NUMBER

3617

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**GROUP 3600**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/614,755  
Filing Date: July 07, 2003  
Appellant(s): MCQUISTIAN ET AL.

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David C. Jenkins  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 12/19/2005 appealing from the Office action  
mailed 05/27/2005.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

4,637,579	Hartung	01-1987
6,648,276	McQuistian	11-2003

20020060273

Schwiede

05-2002

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

9a) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 lines 24-25, the phrase "the point detector connecting rod each being substantially straight and at least partially threaded" is confusing in light of the appellant's argument set forth on page 8 of the appeal brief regarding a ninety degree bent as there is nothing in the specification that defines the degree of bent in the point detector connecting rod.

9b) Claims 1, 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over McQuistian (US 6,648,276 B1) in view of Hartung (US 4,637,579).

Claims 1, 5-6

McQuistian discloses a linkage structured to operatively extend between a railroad switch machine and a pair of movable rails of a railroad switch, the linkage comprising a pair of first rail lugs (A, D), see attached sketch; a pair of second rail lugs (B, C); one of the first rail lugs and one of the second rail lugs being structured to be

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operatively connected with one of the movable rails, the other of the first rail lugs and the other of the second rail lugs being structured to be operatively connected with the other of the movable rails; an operating spread rod (E) adjustably extending between the first rail lugs; an operating lug (F) structured to be connected with an operating rod of the railroad switch machine as shown in fig. 2; an operating connecting rod (G) adjustably extending between the one of the first rail lugs and the operating lug (F); a lock spread rod (28) adjustably extending between the second rail lugs as shown in fig. 1; a lock lug (8) coupling structured to be connected with a lock rod (30) of the railroad switch machine; a lock connecting rod (34) adjustably extending between the one of the second rail lugs and the lock lug (8); a point detector lug (12) structured to be connected with a point detector rod (40) of the railroad switch machine, a point detector connecting rod (44) adjustably extending between the one of the second rail lugs and the point detector lug; the operating spread rod, the operating connecting rod, the lock spread rod, the lock connecting rod each being substantially straight and at least partially threaded. The connecting rods being each independently adjustable.

McQuistian teaches all of the features as listed above but does not disclose a point detector connecting rod that is substantially straight and at least partially threaded. The general concept of providing a point detector connecting rod that is substantially straight to a linkage structure of a switch machine is well known in the art as illustrated by Hartung which discloses the teaching of a point detector connecting rod (46) of the detector rod assembly (26) that is substantially straight and at least partially threaded in coupling relationship to a point detector, see col 3, lines 18-22. It would have been

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obvious to one of ordinary skill in the art at the time of the invention to modify McQuistian to include the use of a point detector connecting rod that is substantially straight and at least partially threaded in his advantageous linkage structure of a switch machine as taught by Hartung in order to facilitate maintenance of the linkage structure.

9c) Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mcquistian (US 6,648,276 B1) in view of Hartung'579 and Schwiede (US 20020060273 A1).

#### Claims 7-10

McQuistian and Hartung teaches all the limitations of claims 7-10 except for switching assembly comprising a point detector connecting rod that is substantially straight and at least partially threaded in addition to a first hollow tie housing the operating connecting rod and lock rod and a second hollow tie housing the lock spread rod, the lock connecting rod, and the point detector connecting rod. The general concept of providing a point detector connecting rod that is substantially straight to a linkage structure of a switch machine is well known in the art as illustrated by Hartung which discloses the teaching of a point detector connecting rod (26) that is substantially straight and at least partially threaded in coupling relationship to a point detector. Also, the general concept of providing "a first hollow tie housing an operating connecting rod and lock rod and a second hollow tie housing a lock spread rod, a lock connecting rod, and a point detector connecting rod" in a switching assembly is well known in the art as

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illustrated by Schwiede which disclose the teaching of "a first hollow tie (2a) housing an operating connecting rod and lock rod and a second hollow tie (2b) housing the lock spread rod, the lock connecting rod, and the point detector connecting rod" in a switching assembly, see col 1, lines 20-60. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify McQuistian to include the use of a point detector connecting rod that is substantially straight and at least partially threaded in his advantageous linkage structure of a switch machine as taught by Hartung in order to facilitate maintenance of the linkage structure. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify McQuistian to include the use of "a first hollow tie housing an operating connecting rod and lock rod and a second hollow tie housing a lock spread rod, a lock connecting rod, and a point detector connecting rod" in his advantageous switching assembly as taught by Schwiede in order to prevent movement at the switch location leading to deformation and damage of the switch parts in addition to difficulty and cost during standard tamping and maintenance of the rail bed.

#### **(10) Response to Argument**

The Appellant's arguments filed 11/19/04 have been fully considered but they are not persuasive.

##### **A. Summary of the appellant's arguments**

In the amendment, the appellant traversed the rejection of claims 1, 5-10 for the following reasons:

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1. The prior art used in the combination rejection, Hartung, "does not disclose, teach, or suggest a point detector connecting rod that is substantially straight and at least partially threaded, as has been asserted by the Examiner". The appellants further stipulates that while "it is conceded that the connector rod (46) of the detector rod assembly (26) and the lock rod (40) of the lock rod assembly (24) both appears in Fig. 1 to be substantially straight in that plane ... it is respectfully submitted that such a view, by itself, cannot constitute a teaching that a longitudinal member is substantially straight" since, Fig. 4 clearly shows that the lock rod (40) includes at least a pair of bends formed therein". Therefore, the connector rod (46) of the detector connector rod assembly (26) of Hartung cannot be substantially straight and at least partially threaded.

2. The appellants argues on page 8 of the brief that "the characteristic of being "substantially straight" relates to the portion of a rod extending along, or adjacent to a common longitudinal axis relative to the total length of the rod and not to the degree of any "bends." For example, the lines in Figures 1 and 2 below represent a rod extending generally horizontally and which includes a vertical portion. That is, the angle of "bends" is ninety degrees. In Figure 1 the vertical portion is approximately one fifth of the total length. In Figure 2, the vertical portion is approximately one twentieth of the total length. As can be seen, the rod in Figure 2, despite having two right angles, is substantially straight relative to the rod in Figure 1".

3. There is no teaching, suggestion or motivation to combine the references in the rejection of claims 7-10.

B. Response to the appellant's arguments



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1. In response to the appellant's argument number 1, it is factual that the point detector connecting rod (46) of the detector assembly (26) of the Hartung reference meets the claim limitation of a point detector connecting rod that is substantially straight and at least partially threaded. It should be reminded that independent claim 1 as well as claim 7 require the that the point detector connecting rod be ***substantially straight and at least partially threaded***. There is no requirement in the claim that the point detector connecting rod be straight and threaded as the appellant is arguing. It should be pointed out that the phrase "substantially straight" encompasses a very broad degree of variation, curve or bent that a member may have provided that it extends in a straight, longitudinal pattern. Thus, contrary to the appellant's contention, figs. 3-4 of the Hartung reference show a substantially straight lock rod (40) of the lock rod assembly (24) with threaded ends. The appellant's argument based on the fact that a couple of minor bends is shown in fig. 4 is weak to change the fact that the connecting rod (46) is substantially straight.

In addition, assuming for the sake of argument that the minor bent of the lock rod (40) shown in figs. 3-4 would exists in the connecting rod (46), Hartung would still meet the requirement of a substantially straight connecting rod which is partially threaded as the broad terminology of "substantially straight" does not remove the possibility of existence of minor bends in the rod.

Moreover, applicant's arguments regarding exhibit B and exhibit C is not understood since in relation to other components such as operating rod, lock spread rod, lock connecting rod or connector rod, the detector rod or bar would normally be offset and

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not be on the same plane as these components as shown in fig. 1 of the appellant's drawing for the switch machine to operate. The offset linkage or couplings known as exhibit B and Exhibit C identified in figs. 4 and 6 of the drawings are necessary for the operation of the machine.

2. In response to the appellant's argument No.2, it must be recognized that there is nothing in the specification that discloses the scope of bent of the connecting rod. The appellant's argument that the depicted figs. 1 and figs. 2, showing ninety degrees bent of a rod on page 8 of the appeal brief, meet the limitations of substantially straight rod constitute issue that was not disclosed in the specification which give rise to a new ground of 112 2<sup>nd</sup> rejection. There is nothing in the specification or in the independent claims 1 or 7 that defines the degree of bent in the connecting rod that the appellant is arguing on page 8 of the appeal brief. Moreover, the appellant's argument that ninety degree bents in lines of figs. 1 and 2 meeting a substantially straight lines on page 8 only prove that the phrase "substantially straight" is broad in scope and is not limited to a straight line alone with zero degree bent.

3. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, an ordinarily

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skilled artisan would be motivated to include the teaching of a point detector connecting rod (46) that is substantially straight and at least partially threaded of Hartung and that of "a first hollow tie housing an operating connecting rod and lock rod and a second hollow tie housing a lock spread rod, a lock connecting rod, and a point detector connecting rod" of Schwiede into Mcquistian in order to achieve among others the benefit of preventing damage to the switch assembly during maintenance of the track bed.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

This examiner's answer contains a new ground of rejection set forth in section (9) above. Accordingly, appellant must within **TWO MONTHS** from the date of this answer exercise one of the following two options to avoid *sua sponte* dismissal of the appeal as to the claims subject to the new ground of rejection:

(1) **Reopen prosecution.** Request that prosecution be reopened before the primary examiner by filing a reply under 37 CFR 1.111 with or without amendment, affidavit or other evidence. Any amendment, affidavit or other evidence must be

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relevant to the new grounds of rejection. A request that complies with 37 CFR 41.39(b)(1) will be entered and considered. Any request that prosecution be reopened will be treated as a request to withdraw the appeal.

(2) **Maintain appeal.** Request that the appeal be maintained by filing a reply brief as set forth in 37 CFR 41.41. Such a reply brief must address each new ground of rejection as set forth in 37 CFR 41.37(c)(1)(vii) and should be in compliance with the other requirements of 37 CFR 41.37(c). If a reply brief filed pursuant to 37 CFR 41.39(b)(2) is accompanied by any amendment, affidavit or other evidence, it shall be treated as a request that prosecution be reopened before the primary examiner under 37 CFR 41.39(b)(1).

Extensions of time under 37 CFR 1.136(a) are not applicable to the TWO MONTH time period set forth above. See 37 CFR 1.136(b) for extensions of time to reply for patent applications and 37 CFR 1.550(c) for extensions of time to reply for ex parte reexamination proceedings.

Respectfully submitted,

Frantz Jules

Primary Examiner

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FRANTZ F. JULES  
PRIMARY EXAMINER



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**A Technology Center Director or designee must personally approve the new ground(s) of rejection set forth in section (9) above by signing below:**

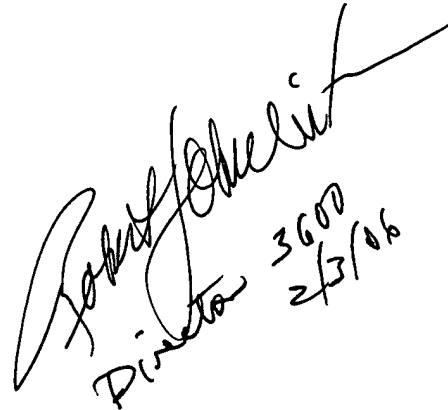
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Conferees:

Joseph S. Morano



Lesley Morris



Director 3600  
2/3/06